

Knobbe Martens Olson & Bear LLP

Intellectual Property Law

2040 Main Street
Fourteenth Floor
Irvine, CA 92614
Tel 949-760-0404
Fax 949-760-9502
www.kmob.com



10/643846

COJC
Katsuhiro Arai
Japanese Patent Attorney
E-mail: karai@kmob.com

August 9, 2005

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Re: Title: DEVICE FOR GEL-COATING SEEDS
Letters Patent No. 6,912,969 *B2*
Issued: July 5, 2005
Our Reference: YANO11.001CP1

*Certificate
AUG 17 2005
of Correction*

Dear Sir:

The applicant noticed an error in the Foreign Application Priority Data on the first page of letters patent for the above-identified patent. The PCT filing date, "December 2, 1999," is an error which was incurred in the parent application (now U.S. Pat. No. 6,631,691). The PCT filing date in the parent application has been corrected to --February 12, 1999-- as indicated in the attached documents. Accordingly, please make a correction in the Office and issue a Certificate of Correction with a correct priority data.

As the error cited in the Certificate of Correction was originally incurred through the fault of the Applicant, enclosed is our check in the amount of \$100. Please charge any additional fees to our Deposit Account No. 11-1410.

Respectfully submitted,

Knobbe, Martens, Olson & Bear, LLP


Katsuhiro Arai
Registration No. 43,315
Customer No. 20,995

Enclosures

1855482
080905

San Diego
619-235-8550

San Francisco
415-954-4114

Los Angeles
310-551-3450

Riverside
951-781-9231

San Luis Obispo
805-547-5580

SEP 02 2005

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,912,969 B2

DATED : July 5, 2005

INVENTOR(S): Kazushi Nakatsukasa

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the title page: Item (30), please change the PCT filing date to --February 12, 1999--.

MAILING ADDRESS OF SENDER:

Katsuhiro Arai
KNOBBE, MARTENS, OLSON & BEAR, LLP
2040 Main Street, 14th Floor
Irvine, California 92614

PATENT NO. 6,912,969

August 9, 2005

YANO11.001CP1
FORM PTO 1050
1855447
080905

No. of add'l. copies
@ 50¢ per page
→

SEP 02 2005



US006912969B2

(12) **United States Patent**
Nakatsukasa

(10) **Patent No.:** US 6,912,969 B2
(45) **Date of Patent:** *Jul. 5, 2005

(54) **DEVICE FOR GEL-COATING SEEDS**

(75) Inventor: Kazushi Nakatsukasa, Hyogo (JP)

(73) Assignee: Agritechno Yazaki Co., Ltd., Hyogo (JP)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: 10/643,846

(22) Filed: Aug. 19, 2003

(65) **Prior Publication Data**

US 2004/0118340 A1 Jun. 24, 2004

Related U.S. Application Data

(63) Continuation-in-part of application No. 09/890,044, filed on Jul. 25, 2001, now Pat. No. 6,631,691.

(30) **Foreign Application Priority Data**Dec. 2, 1999 (WO) ^{→ TIEB. 12,1999} PCT/JP99/00641(51) Int. Cl. ⁷ B05C 5/02

(52) U.S. Cl. 118/13; 118/29; 118/30

(58) Field of Search 118/13, 16, 17, 118/29, 30, 300, 313; 427/4, 212

(56) **References Cited****U.S. PATENT DOCUMENTS**

4,806,357 A 2/1989 Mehischau et al.

4,934,602 A	*	6/1990	Mattson	239/300
5,660,630 A		8/1997	Kohno	
5,718,768 A		2/1998	Ido	
6,048,571 A	*	4/2000	Kohno et al.	427/4
2004/0118340		6/2004	Nakatsukasa	

FOREIGN PATENT DOCUMENTS

EP	0 956 754 A2	11/1999
EP	1 151 649 A1	11/2001
JP	07-264904	10/1995
JP	09-98606	4/1997

* cited by examiner

Primary Examiner—Chris Fiorilla

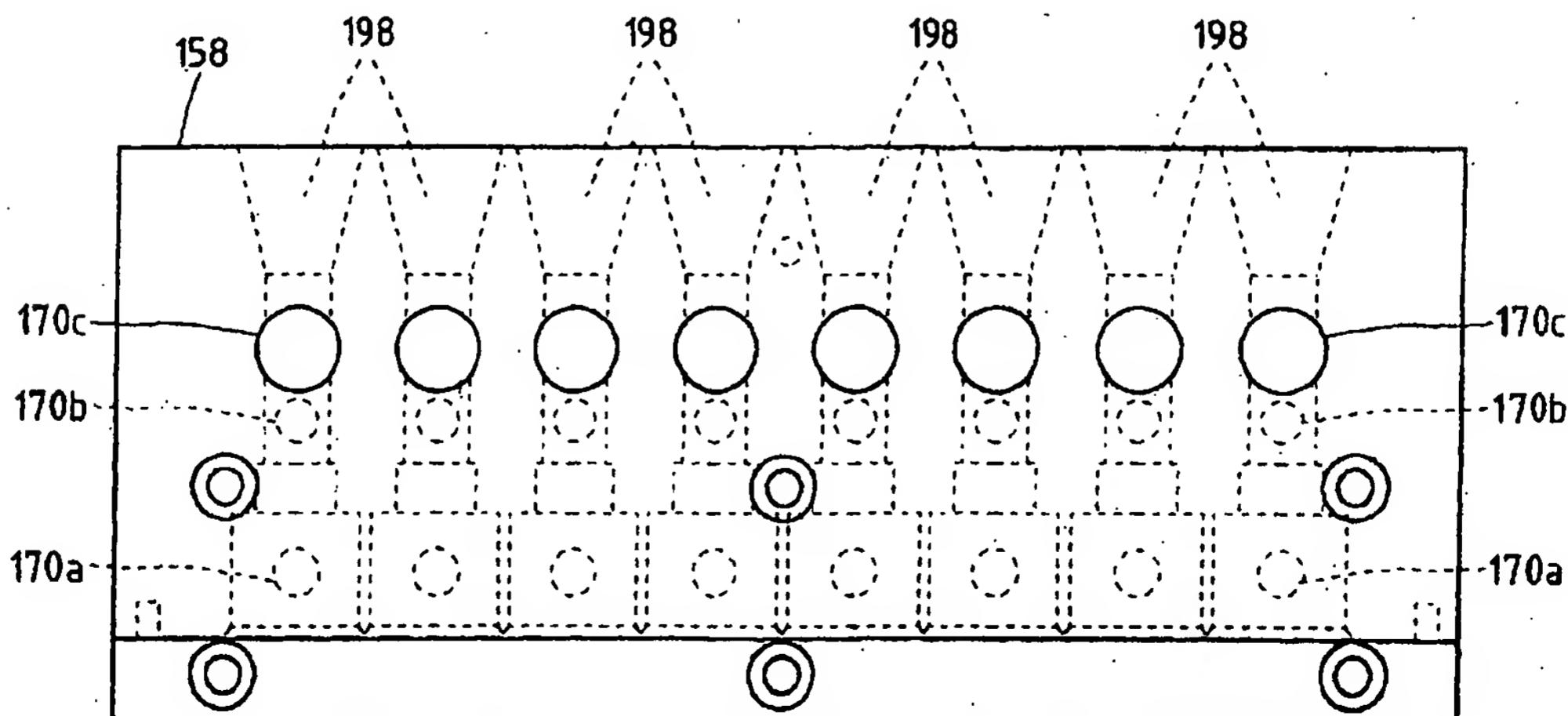
Assistant Examiner—Yewebdar Tadesse

(74) Attorney, Agent, or Firm—Knobbe, Martens Olson & Bear LLP

(57) **ABSTRACT**

A device for gel-coating seeds includes: a plurality of nozzles into each of which a gelling agent is filled and a seed is charged and held in the gelling agent to form a gel-coated seed; a pair of upper and lower nozzle casings joined with each other through a joint surface; galleries for the gelling agent formed on the junction surface; and passages formed in the lower nozzle casing which extend from the respective galleries to the respective gel-filled portions of the nozzles below the galleries. The nozzles vertically penetrate the upper and lower nozzle casings which may be comprised of a bottom plate and nozzle sleeves. The joint surface is arranged higher than a gel-filled portion of each nozzle.

21 Claims, 14 Drawing Sheets



PCT

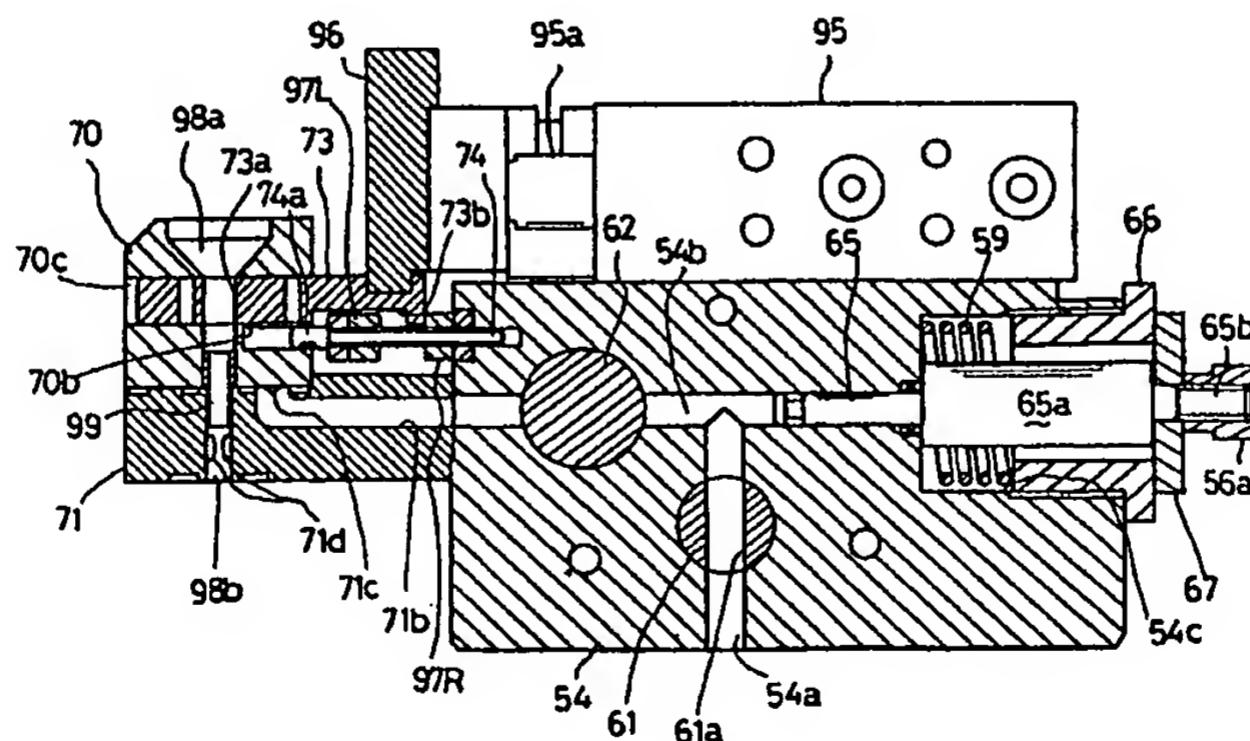
世界知的所有権機関
国際事務局
特許協力条約に基づいて公開された国際出願



(51) 国際特許分類6 A01C 1/06	A1	(11) 国際公開番号 WO00/47034 (43) 国際公開日 2000年8月17日(17.08.00)
(21) 国際出願番号 PCT/JP99/00641 (22) 国際出願日 1999年2月12日(12.02.99) (71) 出願人 (米国を除くすべての指定国について) アグリテクノ矢崎株式会社 (AGRITECNO YAZAKI CO., LTD.)[JP/JP] 〒670-0996 兵庫県姫路市土山六丁目5番12号 Hyogo, (JP) (72) 発明者 ; および (75) 発明者 / 出願人 (米国についてのみ) 中司和志(NAKATSUKASA, Kazushi)[JP/JP] 〒670-0996 兵庫県姫路市土山六丁目5番12号 アグリテクノ矢崎株式会社内 Hyogo, (JP) (74) 代理人 弁理士 矢野寿一郎(YANO, Juichiro) 〒542-0081 大阪府大阪市中央区南船場一丁目11番9号 長堀八千代ビル Osaka, (JP)	(81) 指定国 JP, US, 欧州特許 (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE) 添付公開書類 国際調査報告書	

(54) Title: DEVICE FOR GEL-COATING SEEDS

(54) 発明の名称 種子のゲル被覆加工装置



(57) Abstract

A device for gel-coating seeds having a structure in which a gelling agent is filled into a nozzle, and seeds are charged into and held in the gelling agent to form gel-coated seeds which are then allowed to fall. A nozzle (98) into which a gelling agent and seeds are charged is provided to the nozzle case (70) (71) of a processing unit (2), an open/close rod (73) at a nozzle intermediate portion is slidably inserted into the upper portion of the nozzle case, an air chamber (70b), in which the piston (74a) of a compression pin (74) sliding interlockingly with the open/close rod (73) can reciprocate, is provided below the rod, the air chamber (70b) being allowed to communicate with the nozzle (98), the upper portion of the nozzle (98) is blocked with the open/close rod (73) after the gelling agent is filled in a drop hole (98b) in the lower portion of the nozzle and the seeds are charged, air is fed into the nozzle (98) by allowing the piston (74a) above the nozzle to slide, and gel-coated seed are discharged from the nozzle.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,631,691 B1
DATED : October 14, 2003
INVENTOR(S) : Kazushi Nakatsukasa

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page.

Item [22], please change the PCT Filing date to -- **February 12, 1999** --.



Signed and Sealed this
Sixth Day of January, 2004

JAMES E. ROGAN
Director of the United States Patent and Trademark Office